

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/603,947	06/25/2003	W. Perry Dowst	65841-017 (WMST-003) 3129		
20874	7590 06/28/2006		EXAMINER		
WALL MARJAMA & BILINSKI 101 SOUTH SALINA STREET			PRICE, CARL D		
SUITE 400	SALINA SIREEI		ART UNIT PAPER NUMBER		
SYRACUSE,	NY 13202		3749	<u> </u>	
			DATE MAILED: 06/28/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application	on No.	Applicant(s)				
	10/603,947		DOWST ET AL.				
Office Action Summary	Examiner		Art Unit				
	CARL D. F		3749				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica. If the period for reply specified above is less than thirty (30) da  - If NO period for reply is specified above, the maximum statutor  - Failure to reply within the set or extended period for reply will, I Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION.  7 CFR 1.136(a). In no everation.  1 ys, a reply within the statury period will apply and with by statute, cause the apply	ent, however, may a reply be time story minimum of thirty (30) day. Il expire SIX (6) MONTHS from lication to become ABANDONE	nely filed s will be considered time the mailing date of this considered to the considered time.				
Status							
1) Responsive to communication(s) filed o	n <u>03/28/05 (RCE)</u>	and amendment of 04	<u>1/24/06</u> .				
! <u> </u>	This action is n						
3) Since this application is in condition for	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice u	ınder <i>Ex parte Qu</i>	ayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims							
4) Claim(s) 106-160 is/are pending in the a 4a) Of the above claim(s) is/are w 5) Claim(s) is/are allowed. 6) Claim(s) 106-160 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction	vithdrawn from con						
Application Papers			•				
9) The specification is objected to by the Example 10) The drawing(s) filed on is/are: a)  Applicant may not request that any objection Replacement drawing sheet(s) including the 11) The oath or declaration is objected to by	accepted or b)  n to the drawing(s) b  correction is require	ee held in abeyance. See ed if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 C	• •			
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for a a) All b) Some * c) None of:  1. Certified copies of the priority doc 2. Certified copies of the priority doc 3. Copies of the certified copies of the application from the International * See the attached detailed Office action for	cuments have bee cuments have bee he priority docume Bureau (PCT Rule	n received. n received in Applicati ents have been receive e 17.2(a)).	on No ed in this National	Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-3) Information Disclosure Statement(s) (PTO-1449 or PTO Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	O-152)			
U.S. Patent and Trademark Office	Office Action Summa		rt of Paper No./Mail D	Date 20060622			

#### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/28/2005 has been entered.

# Response to Arguments

Applicant's arguments with respect to claims 106-160 have been considered but are moot in view of the new ground(s) of rejection.

Applicant has amended the claims to be of a scope not previously considered. Consistent with applicant's argument that the prior art relied on in the previous office action fail to show, disclose and/or teach certain aspects of applicant's invention now recited in the claims filed on 03/28/05 (RCE) and 04/24/06. For example, applicant has amended the clams to now include the following:

(claim 1)

"a single thermally conductive member <u>comprising a continuous piece of</u> <u>material</u> fixedly attached to and positioned adjacent to and <u>extending</u> <u>continuously</u> along the entire extent of a peripheral edge of the external bottom side and having an inner peripheral edge defining an inner diameter and an outer peripheral edge defining an outer diameter, the conductive member having a plurality of undulating protrusions extending downwardly from the external bottom side;"

The scope of the claimed invention is now addressed in the following Examiner's action where the newly discovered prior art reference of **GB000882881** is now relied on to teach placing a single thermally conductive member (15) along the entire extent of a peripheral edge of

Art Unit: 3749

the external bottom side. The member comprising a continuous piece of aluminum material soldered to and positioned adjacent to and extending continuously over the bottom of a vessel (see page 2, lines 100-105).

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

## Claims Rejected under 35 U.S.C. 102(b)

Claims 151-154 and 159 are rejected under 35 U.S.C. 102(b) as being anticipated by US002154305 (of record).

US002154305 shows a portable heating system comprising:

- a vessel (13) having a thermally conductive bottom end defining an external bottom side (31, 32, 33) of the vessel;
- a top housing (16) having a top rim (53) coupled circumferentially to the external bottom side of the vessel (at 32, 53), a side structure (54) extending downwardly from the top rim (53) and having a plurality of exhaust vents (82) formed therein, and a bottom rim (48, 51);
- a bottom housing (17) having a top rim (49, 52) configured to be selectively coupled to the top housing bottom rim (48) and containing a burner (15) having a heat outlet head disposed below the external bottom side of the vessel when the bottom housing is coupled to the top housing (see figure 8), the bottom housing further having a plurality of air inlet vents (81) formed therein;

Application/Control Number: 10/603,947

Art Unit: 3749

- wherein the bottom housing is so configured and sized as to be removable from said top housing and temporarily placed for storage in the vessel cavity (see figure 4).

Page 4

- In regard to claim 152, since the diameter of the lower end rim (55) of the bottom housing (17) is less than the diameter of vessel outlet port (35) it is capable of being place in the vessel in the manner set forth in the claim.
- In regard to claims 153 and 154, the fuel source and burner are formed as a single unit and supported by and at a lower bottom housing location (i.e. -below the top rim (49)).

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

#### Claims Rejected under 35 U.S.C. 103(a)

Claims 106-116 are rejected under 35 U.S.C. 103(a) as being unpatentable over US002154305 (of record) in view of GB000882881 (newly cited).

US002154305 shows a portable heating system comprising:

Application/Control Number: 10/603,947

Art Unit: 3749

- a vessel (13) having a thermally conductive bottom end defining an external bottom side (31, 32, 33) of the vessel;

a top housing (16) having a top rim (53) coupled circumferentially to the external bottom side of the vessel (at 32, 53), a side structure (54) extending downwardly from the top rim (53) and having a plurality of exhaust vents (82) formed therein, and a bottom rim (48, 51);

Page 5

a bottom housing (17) having a top rim (49, 52) configured to be selectively coupled to the top housing bottom rim (48) and containing a burner (15) having a heat outlet head disposed below the external bottom side of the vessel when the bottom housing is coupled to the top housing (see figure 8), the bottom housing further having a plurality of air inlet vents (81) formed therein

US002154305 shows and discloses the invention substantially as set forth in the claims with possible exception to:

- a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side. The member comprising a continuous piece of aluminum material soldered to and positioned adjacent to and extending continuously over the bottom of a vessel (see page 2, lines 100-105).

GB000882881 teaches, from applicant's same portable heater field of endeavor, placing a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side. The member comprising a continuous piece of aluminum material soldered to and positioned adjacent to and extending continuously over the bottom of a vessel (see page 2, lines 100-105).

In regard to claims 106-116, for the purpose of making the base readily separable from the base and the base is storable within the vessel and to increase the thermal heat efficiency by confining the flow to heat about the vessel bottom, it would have been obvious to a person

Art Unit: 3749

having ordinary skill in the art to modify US002154305 to include a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side in the manner set forth in applicant's claims, in view of the teaching of GB000882881.

In regard to claims 111-116, since shape of the protrusions the manner of coupling (e.g. – soldering, brazing, gluing, etc.), the height of the vessel, length of the protrusions, aspect ratio of the protrusions, etc. would depend on numerous design concerns such as the overall size and shape of both the burner and vessel, the type of substance being heat, the amount of heat intended to be transferred to the substance through the vessel wall, etc., to configure the protrusions to have dimensions and to be attached in the manner set forth in the claims, can be viewed as nothing more than merely a matter of choice in design absent the showing of any new or unexpected results produced there from over the prior art of record. Further in this regard it is noted that GB000882881 itself teaches that elements, such as apertures 20, are of such a size "that the maximum amount of heat is absorbed by the strip 15 which is secured in intimate heat-conducting relationship with the base of the kettle" (beginning page 2, line15).

#### Claims Rejected under 35 U.S.C. 103(a)

Claims 117-149 are rejected under 35 U.S.C. 103(a) as being unpatentable over US002154305 (of record) in view of GB000882881 (newly cited) and DE 33 39 848 (of record).

US002154305 shows a portable heating system comprising:

- a vessel (13) having a thermally conductive bottom end defining an external bottom side (31, 32, 33) of the vessel;
- a top housing (16) having a top rim (53) coupled circumferentially to the external bottom side of the vessel (at 32, 53), a side structure (54) extending downwardly from the top rim (53) and having a plurality of exhaust vents (82) formed therein, and a bottom rim (48, 51);

a bottom housing (17) having a top rim (49, 52) configured to be selectively coupled to the top housing bottom rim (48) and containing a burner (15) having a heat outlet head disposed below the external bottom side of the vessel when the bottom housing is coupled to the top housing (see figure 8), the bottom housing further having a plurality of air inlet vents (81) formed therein.

US002154305 shows and discloses the invention substantially as set forth in the claims with possible exception to:

- a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side. The member comprising a continuous piece of aluminum material soldered to and positioned adjacent to and extending continuously over the bottom of a vessel (see page 2, lines 100-105).

GB000882881 teaches, from applicant's same portable heater field of endeavor, placing a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side. The member comprising a continuous piece of aluminum material soldered to and positioned adjacent to and extending continuously over the bottom of a vessel (see page 2, lines 100-105).

**DE 33 39 848** teaches (figures 1 and 2), from applicant's same portable heater field of endeavor dimension the outer burner diameter to be less than the diameter of the inner central cavity formed by the thermally conductive members, for the purpose of effectively directing heat from the burner flames into and along the heat transfer passages.

In regard to claims 117-149, for the purpose of making the base readily separable from the base and the base is storable within the vessel and to increase the thermal heat efficiency by confining the flow to heat about the vessel bottom, it would have been obvious to a person having ordinary skill in the art to modify US002154305 to include a single thermally conductive member (15) along the entire extent of a peripheral edge of the external bottom side in the

Art Unit: 3749

manner set forth in applicant's claims, in view of the teaching of GB000882881. Furthermore, in regard to claims 117-149, for the purpose of effectively directing heat from the burner flames into and along the heat transfer passages, it would have been obvious to a person having ordinary skill in the art to dimension the outer burner diameter to be less than the diameter of the inner central cavity formed by the thermally conductive members, in view of the teaching of DE 33 39 848.

In regard to claims 122-128, 134-139 and 145-149, since shape of the protrusions the manner of coupling (e.g. – soldering, brazing, gluing, etc.), the height of the vessel, length of the protrusions, aspect ratio of the protrusions, etc. would depend on numerous design concerns such as the overall size and shape of both the burner and vessel, the type of substance being heat, the amount of heat intended to be transferred to the substance through the vessel wall, etc., to configure the protrusions to have dimensions and to be attached in the manner set forth in the claims, can be viewed as nothing more than merely a matter of choice in design absent the showing of any new or unexpected results produced there from over the prior art of record. Further in this regard it is noted that GB000882881 teaches that elements, such as apertures 20, are of such a size "that the maximum amount of heat is absorbed by the strip 15 which is secured in intimate heat-conducting relationship with the base of the kettle" (beginning page 2, line15).

## Claims 156-160: Rejected under 35 U.S.C. 103

Claims 156-158 and 160 are rejected under 35 U.S.C. 103(a) as being unpatentable over US002154305 (of record) in view of FR 2 446 097 (of record).

US002154305 shows and discloses the invention substantially as set forth in the claims with possible exception to:

an igniter portion disposed above the burner and a recess or indentation in the cover (15) for receiving or accommodate the extending igniter portion; and

Art Unit: 3749

friction or slot and dimple attachment means for the upper and lower housings.

FR 2 446 097 teaches, from applicant's same portable heater field of endeavor, providing portable collapsible heaters with burners of the type having a threaded fuel source connection located in the lower portion thereof for connection to a fuel source there below.

In regard to claim 155-158 and 160, for the purpose of providing a suitable alternative burner and fuel source, it would have been obvious to a person having ordinary skill in the art to modify US002154305 to include a burners of the type having a threaded fuel source connection located in the lower portion, in view of the teaching of FR 2 446 097. Also, Official Notice is taken that it is well known to place igniters above, that is, downstream of fuel exiting burner heads as a recognized optimal location to effect ignition of the fuel. Thus, in view of that which is well known, it would have been obvious to a person having ordinary skill in the art to provide US002154305 with such an igniter arrangement. Regarding any necessary recess or indentation in the cover for receiving or accommodate the extending igniter portion it is noted that the covers (23, 39,40, 41) of US002154305 is formed with such a recess capable of performing this function. In regard to claims 159 and 160, Official Notice is taken that burner components are known to be secured by slot and dimple attachment means for (see for example US004374489). Thus, it would have been obvious to a person having ordinary skill in the art to modify attachment of the upper and lower housings in US002154305 to include such well known securing and fastening arrangement.

# **Conclusion**

See the attached PTO FORM for prior art made of record that is not relied upon, which is considered pertinent to applicant's disclosure.

Art Unit: 3749

# <u>USPTO CUSTOMER CONTACT INFORMATION</u>

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CARL D. PRICE

Primary Examiner

Art Unit 3749